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10/045,605	01/11/2002	Mark Lucera	108-152USA000	3687

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EXAMINER

LE, THIEN MINH

ART UNIT

PAPER NUMBER

2876

DATE MAILED: 06/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Applicati n N .

10/045,605

Applicant(s)

LUCERA ET AL.

Examiner

Thien M. Le

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-- The MAILING DATE of this communication appears on the cover sheet with the c rresp ndence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 8-10, 12-13 is/are rejected.
- 7) ☒ Claim(s) 5-7, 11 and 14 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 1/11/02 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

Claims 1-14 are presented for examination.

#### ***Drawings***

The informal drawings filed in this application are acceptable for examination purposes. When the application is allowed, applicant will be required to submit new formal drawings. In unusual circumstances, the formal drawings from the abandoned parent application may be transferred by the grant of a petition under 37 CFR 1.182.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical

Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000.

Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Li et al. (herein Li – 5,332,892) or under 35 U.S.C. 102(e) by Redderson et al. (herein Redderson – 6,505, 778).

Li discloses bar code reader having a signal processor 47 for deriving the two sensing spots and or the two channels of data having differing resolution. In a preferred embodiment, Li discloses a wand type reader includes an LED light source and a single photodiode type detector, wherein the detector signal passes through two different signal conditioning circuits and associated digitizers. One signal conditioning circuit and associated digitizer provide a high resolution output, and the other signal conditioning circuit and associated digitizer produce a low resolution output. A microprocessor analyzes the digital data from both channels to decode the scanned bar coded data. The two resolution channels allow reading of dense high resolution bar codes and low resolution bar codes such as those produced by dot matrix printers, with a single pass or scan of a single bar code reader.

Redderson, in additional, discloses an optical reader with selectable processing characteristics for reading data in multiple formats. Specifically, Redderson discloses a multi-function optical reader comprises an photosensor, such as a charge-device (CCD), and signal conditioning and processing circuitry including separate channels

for handling data in different formats. A bar code processing channel digitizes the scan signal according to light and dark features using a first-derivative technique, and an OMR processing channel uses an adaptive threshold to adapt to different light conditions and provide a boundary line for digitizing light and dark features of the target scan line. A feature measurement circuit measures the widths of the light and dark regions as derived by the separate processing channels, and provides the feature measurements to a decoding system or host terminal processor.

As can be seen, either Li or Redderson would disclose the claimed invention.

Claim 2 is rejected under 35 U.S.C. 102(e) by Redderson et al. (herein Redderson – 6,505, 778).

Regarding claim 2, see the discussions regarding claim 1. It is noted that Redderson discloses that the bar code channel 504 (figure 19) comprises a filter and gain stage 530, a first derivative circuit 531, and a digitizer 532. Redderson further discloses that the digitizer (see Figure 20s) comprises a fast-decay peak detector comprising a resistor R6 and a capacitor C15 which briefly holds the peak amplitude value of the first derivative signal 637, and a comparator 634 which compares the briefly held first derivative signal peak against the first derivative signal 637. Accordingly, when the first derivative signal 637 has a signal peak or valley, the first derivative signal 637 crosses with the amplitude value briefly held by the fast-decay peak detector, causing the comparator 634 to switch output states. The output of comparator 634 is the digital bar code signal 620. From the descriptions above, a

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threshold level is considered inherent in the digitizer. This threshold level is different from an adaptive OMR threshold signal 648 corresponding to adaptive OMR threshold signal 548 in FIG. 19.

Regarding claims 3-4, Redderson discloses an adaptive OMR threshold signal which would meet all limitations set forth in this claim.

Regarding claims 8-10, the system as shown in figure 19 comprises both analog and digital processing circuitry, and a signal processor 47 which would embrace all limitations set forth in these claims.

Regarding claims 12-13, see the discussions above regarding claims 1-2, 3-4, and 8-10.

### ***Allowable Subject Matter***

Claims 5-7, 11, and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The prior art fails to disclose the claimed laser scanning system having different processing paths having the features and characteristics as recited in claims 5-7, 11 and 14.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thien M. Le whose telephone number is (703) 305-3500. The examiner can normally be reached on Monday - Friday from 7:30am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (703) 305-3503. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-5841 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



**Le, Thien Minh**  
**Primary Examiner**  
**Art Unit 2876**  
**May 22, 2003**